



DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES
Minerals & Mining Program - Oil & Gas Section
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FORM 2

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DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RCRO

APPLICATION FOR PERMIT TO DRILL

Type of Work:

☒ Drill New Well
☐ Other

☐ Re-enter Well

☐ Drill Directional Well

Type of Well:

☒ Oil Well
☐ Other

☐ Gas Well

☐ Injection

Name and Address of Operator

LUFF EXPLORATION COMPANY, 1580 LINCOLN STREET, SUITE 850, DENVER, CO 80203

Telephone

(303) 861-2468

Name and Address of Surface Owner

Doug and Leroy Abrahamson

14207 101st ST SW, Bowman, ND 58623

Name and Address of Drilling Contractor and Rig Number:

Patterson Drilling Company, 1512 Larimer Street, Suite 730, Denver, CO 80202, Rig #463 (Vertical Section)

C & H Well Service, Inc. P O Box 2556, Gillette, WY 82717-2556, Rig #104, (Horizontal Laterals)

Surface Location of Well: Qtr-Qtr, Sec, Twp, Rge, County, Feet from Nearest Lines of section, and latitude and longitude (if available):

NESE Sec 21, T23N, R6E, Harding County, 2580' FSL x 825' FEL; Lat 45 56' 34.17" Long: 103 22' 46.89"

If Directional, top of pay and bottom hole location from nearest lines of section:

West Lateral: Top est. @ 9073' MD, = 9015' TVD; 2580' FSL x 1955' FWL

SE Lateral: Top est. @ 9082' MD, = 9015' TVD; 1975' FSL x 1525' FWL, Sec 22, T23N, R6E

Acres in Spacing (Drilling) Unit

960

Description of Spacing Unit

All Section 21 & All Section 22, T23N, R6E

Well Name and Number		Elevation	Field and Pool, or Wildcat		Proposed Depth and Formation
Abrahamson I -21H		2888.4'	Corey Butte		West: 9015' TVD; 11466' MD RR SE: 9015' TVD; 11391' MD RR
Size of Hole	Size of Casing	Weight per Foot	Depth	Cementing Program (amount, type, additives)	
1) 12 1/4"	8 5/8"	24#	2000'	635 Sx Premium Lite & Class G, 3% salt +m misc..	
2) 7 7/8"	5 1/2"	15.5# & 17#	9125'	750 sx Premium Lite & Class G + various additives	
3)					
4)					

Describe Proposed Operations (Clearly State all Pertinent Details, and Give Pertinent Dates, Including Estimated Date of Starting any Proposed Work). Use Additional Page(s) if appropriate.

Drill vertical portion of well to 9125'. Drill 7 7/8" hole, run 5 1/2" casing. A directional survey will be run @ 100' intervals to determine the BHL of the vertical well. Move out rotary tools and move in smaller rig, mill casing windows and drill dual horizontal laterals in the Red River "B". West Lateral KOP approx. 8,916' TVD, SE Lateral KOP approx. 8,901' TVD. Drill 4 1/2" horizontal laterals in the "B" zone. West Lateral to approx. 11,466' MD = 9,015' TVD and the SE lateral to approx. 11,391' = 9,015' TVD. An oil base mud will be used in the vertical portion of the well and a fresh water/polymer in the horizontal sections. All drilling fluids and cuttings will be contained in a pit lined with 12 mill plastic. All liquids will be disposed of in an approved site, the liner and the cuttings will be buried in place. See attached Preliminary Drilling Prognosis for additional details. Completion will be open hole in the horizontal sections. The estimated start date for locations construction is November 15, 2006. Estimated start date for drilling is February 20, 2007.

Blanket South Dakota bond #4127010

I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation.

Signature

David A. Norby

Name (Print)

Operations Manager

Title

10/31/2006

Date

FOR OFFICE USE ONLY

Approved by:

Title: Oil and Gas Supervisor

Permit No. 1801

API No. 40 063 20612

Date Issued: November 22, 2006

Conditions, if any, on attached page.